

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-49 (Cancelled).

Claim 50 (Currently Amended): A photocatalytic member having photocatalytic and color forming properties; said member comprising:

a substrate; and

a laminate deposited on the substrate, which laminate has a plurality of thin-film photocatalytic layers, each made of a photocatalytic material, and a plurality of thin-film support layers;

wherein the plurality of thin-film photocatalytic layers and the plurality of thin-film support layers alternate with each other and contact sequentially at surface areas ~~each smaller than the area of the contacted thin-film photocatalytic layer~~, wherein each thin-film support layer has a smaller surface area than the surface area of the contacting thin-film photocatalytic layers, leaving a space between adjacent photocatalytic layers and next to a support layer, said space being open to the outside of said member, the thin-film photocatalytic layer nearest the substrate being the lowermost of said thin-film photocatalytic layers, the remaining layers being sequentially more distant from the substrate.

Claim 51 (Previously Presented): The photocatalytic member according to Claim 50, further comprising an opening on a surface of said member and through a thin-film photocatalytic layer, and wherein a space communicates with the opening in order to be open to the outside of said member by way of the opening.

Claim 52 (Previously Presented): The photocatalytic member according to Claim 50, wherein said plurality of thin-film photocatalytic layers are made of titanium dioxide.

Claim 53 (Previously Presented): The photocatalytic member according to Claim 50, wherein said plurality of thin-film support layers are made of one member selected from the group consisting of metals with a melting point of 400°C or higher, semiconductors and insulators.

Claim 54 (Currently Amended): The photocatalytic member according to Claim 51, wherein said openings are shaped like parallel grooves.

Claim 55 (Currently Amended): ~~The photocatalytic member according to Claim 51~~  
A photocatalytic member having photocatalytic and color forming properties; said member comprising:

a substrate; and

a laminate deposited on the substrate, which laminate has a plurality of thin-film photocatalytic layers, each made of a photocatalytic material, and a plurality of thin-film support layers;

wherein the plurality of thin-film photocatalytic layers and the plurality of thin-film support layers alternate with each other and contact sequentially at surface areas, wherein each thin-film support layer has a smaller surface area than the surface area of the contacting thin-film photocatalytic layers, leaving a space between adjacent photocatalytic layers and next to a support layer, said space being open to the outside of said member, the thin-film photocatalytic layer nearest the substrate being the lowermost of said thin-film photocatalytic layers, the remaining layers being sequentially more distant from the substrate, and

further comprising an opening on a surface of said member and through a thin-film photocatalytic layer, and wherein a space communicates with the opening in order to be open to the outside of said member by way of the opening, wherein said opening is circular, elliptical or polygonal.

Claim 56 (Previously Presented): The photocatalytic member according to Claim 51, wherein said opening comprises a plurality of openings disposed at uniform intervals.

Claim 57 (Currently Amended and Withdrawn): The photocatalytic ~~colored~~ member according to Claim 51, wherein said opening comprises a plurality of openings disposed at nonuniform intervals.

Claim 58 (Currently Amended): ~~The photocatalytic member according to Claim 51~~  
A photocatalytic member having photocatalytic and color forming properties; said member comprising:

a substrate; and

a laminate deposited on the substrate, which laminate has a plurality of thin-film photocatalytic layers, each made of a photocatalytic material, and a plurality of thin-film support layers;

wherein the plurality of thin-film photocatalytic layers and the plurality of thin-film support layers alternate with each other and contact sequentially at surface areas, wherein each thin-film support layer has a smaller surface area than the surface area of the contacting thin-film photocatalytic layers, leaving a space between adjacent photocatalytic layers and next to a support layer, said space being open to the outside of said member, the thin-film

photocatalytic layer nearest the substrate being the lowermost of said thin-film photocatalytic layers, the remaining layers being sequentially more distant from the substrate, and

further comprising an opening on a surface of said member and through a thin-film photocatalytic layer, and wherein a space communicates with the opening in order to be open to the outside of said member by way of the opening, and

wherein said plurality of thin-film support layers are disposed at a center of said spaces to support the thin-film catalytic layers and maintain said spaces and each support layer has a circular, elliptical or polygonal cross section when viewed from the surface of said member, and said laminate is deposited on a portion or an entire surface of the substrate.

Claim 59 (Currently Amended and Withdrawn): The photocatalytic ~~eolored~~ member according to Claim 50, wherein the surface areas of the layers of said laminated thin-film layers of photocatalytic material are equal to each other.

Claim 60 (Currently Amended and Withdrawn): The photocatalytic ~~eolored~~ member according to Claim 51, wherein the surface areas of the layers of said laminated thin-film layers of photocatalytic material are equal to each other.

Claim 61 (Previously Presented): The photocatalytic member according to Claim 50, wherein said plurality of thin-film photocatalytic layers have surface areas becoming larger toward the lowermost thin-film photocatalytic layer.

Claim 62 (Previously Presented): The photocatalytic member according to Claim 51, wherein said plurality of thin-film photocatalytic layers have surface areas becoming larger toward the lowermost thin-film photocatalytic layer.

Claim 63 (Currently Amended and Withdrawn): The photocatalytic ~~colored~~ member according to Claim 50, wherein said plurality of thin-film photocatalytic layers have surface areas becoming smaller toward the lowermost thin-film photocatalytic layer.

Claim 64 (Currently Amended and Withdrawn): The photocatalytic ~~colored~~ member according to Claim 51, wherein said plurality of thin-film photocatalytic layers have smaller areas becoming smaller toward the lowermost thin-film photocatalytic layer.

Claim 65 (Previously Presented): The photocatalytic member according to Claim 50, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an anatase structure.

Claim 66 (Previously Presented): The photocatalytic member according to Claim 51, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an anatase structure.

Claim 67 (Previously Presented): The photocatalytic member according to Claim 52, wherein said titanium dioxide has an anatase structure.

Claim 68 (Previously Presented): The photocatalytic member according to Claim 53, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an anatase structure.

Claim 69 (Currently Amended): The photocatalytic ~~colored~~ member according to Claim 54, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an anatase structure.

Claim 70 (Currently Amended): The photocatalytic ~~colored~~ member according to Claim 55, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an anatase structure.

Claim 71 (Currently Amended): The photocatalytic ~~colored~~ member according to Claim 56, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an anatase structure.

Claim 72 (Currently Amended and Withdrawn): The photocatalytic ~~colored~~ member according to Claim 57, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an anatase structure.

Claim 73 (Currently Amended): The photocatalytic ~~colored~~ member according to Claim 58, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an anatase structure.

Claim 74 (Currently Amended and Withdrawn): The photocatalytic ~~colored~~ member according to Claim 59, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an anatase structure.

Claim 75 (Currently Amended and Withdrawn): The photocatalytic ~~colored~~ member according to Claim 60, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an anatase structure.

Claim 76 (Currently Amended): The photocatalytic ~~colored~~ member according to Claim 61, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an anatase structure.

Claim 77 (Currently Amended): The photocatalytic ~~colored~~ member according to Claim 62, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an anatase structure.

Claim 78 (Currently Amended and Withdrawn): The photocatalytic ~~colored~~ member according to Claim 63, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an anatase structure.

Claim 79 (Currently Amended and Withdrawn): The photocatalytic ~~colored~~ member according to Claim 64, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an anatase structure.

Claim 80 (Currently Amended and Withdrawn): The photocatalytic ~~colored~~ member according to Claim 50, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an amorphous structure.

Claim 81 (Currently Amended and Withdrawn): The photocatalytic ~~colored~~ member according to Claim 51, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an amorphous structure.

Claim 82 (Currently Amended and Withdrawn): The photocatalytic ~~colored~~ member according to Claim 52, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an amorphous structure.

Claim 83 (Currently Amended and Withdrawn): The photocatalytic ~~colored~~ member according to Claim 53, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an amorphous structure.

Claim 84 (Currently Amended and Withdrawn): The photocatalytic ~~colored~~ member according to Claim 54, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an amorphous structure.

Claim 85 (Currently Amended and Withdrawn): The photocatalytic ~~colored~~ member according to Claim 55, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an amorphous structure.

Claim 86 (Currently Amended and Withdrawn): The photocatalytic ~~colored~~ member according to Claim 56, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an amorphous structure.



Claim 87 (Currently Amended and Withdrawn): The photocatalytic ~~eolored~~ member according to Claim 57, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an amorphous structure.

Claim 88 (Currently Amended and Withdrawn): The photocatalytic ~~eolored~~ member according to Claim 58, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an amorphous structure.

Claim 89 (Currently Amended and Withdrawn): The photocatalytic ~~eolored~~ member according to Claim 59, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an amorphous structure.

Claim 90 (Currently Amended and Withdrawn): The photocatalytic ~~eolored~~ member according to Claim 60, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an amorphous structure.

Claim 91 (Currently Amended and Withdrawn): The photocatalytic ~~eolored~~ member according to Claim 61, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an amorphous structure.

Claim 92 (Currently Amended and Withdrawn): The photocatalytic ~~eolored~~ member according to Claim 62, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an amorphous structure.

Claim 93 (Currently Amended and Withdrawn): The photocatalytic ~~eolored~~ member according to Claim 63, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an amorphous structure.

Claim 94 (Currently Amended and Withdrawn): The photocatalytic ~~eolored~~ member according to Claim 64, wherein said plurality of thin-film photocatalytic layers are made of titanium oxide with an amorphous structure.

Claim 95 (Currently Amended): A photocatalytic ~~eolored~~ member according to Claim 50, wherein the thickness of the thin-film photocatalytic layers and of the spaces between them are such that their optical thicknesses are  $\lambda/4$  where  $\lambda$  is the central wavelength of the desired light to be emitted.